

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In the application of : HESSION, Patrick

Serial No. : 10/741,518

Filed : December 19, 2003

For : Methods Of Monitoring Communications Sessions In A Contact Centre

Examiner : Tieu, Benny Quoc

Art Unit : 2614

**RESPONSE TO NOTICE MAILED MAY 18, 2007**

Honorable Director of Patents and Trademarks  
PO Box 1450  
Alexandria, VA 22313-1450

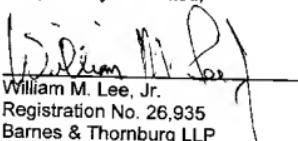
Dear Sir,

In response to the Notice mailed May 18, 2007, the Response filed on April 4, 2007 is retransmitted herewith. The acknowledgement receipt from the Patent and Trademark Office clearly shows that eight (8) pages were transmitted to the Patent and Trademark Office, so apparently there has been some problem with the system of the PTO. In any event, the full response is being retransmitted herewith along with the acknowledgement receipt of April 4, 2007 which clearly indicates that eight (8) sheets were received.

Further action by the Patent and Trademark Office is awaited.

May 23, 2007

Respectfully submitted,

  
\_\_\_\_\_  
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IN THE UNITED STATES PATENT AND  
TRADEMARK OFFICE

In the application of : HESSION, Patrick  
: McCORMACK, Tony  
: HICKEY, James  
Serial No. : 10/741,518  
Filed : December 19, 2003  
For : Methods Of Monitoring Communications Sessions In  
A Contact Centre  
Examiner : Tieu, Benny Quoc  
Art Unit : 2614

RESPONSE TO OFFICE ACTION OF JANUARY 4, 2007

Honorable Director of Patents and Trademarks  
PO Box 1450  
Alexandria, VA 22313-1450

Dear Sir,

In response to the Examiner's Office Action of January 4, 2007, the Applicants make the following amendments and remarks:

**In the Claims**

Claims 1, 5, 6 and 19-23 are amended as follows.

1. (Currently amended) A method of monitoring a voice communications session between an agent of a contact centre and a user of said contact centre comprising the steps of:
  - a) receiving voice data from said communications session,
  - b) analysing said voice data to locate a pattern of data indicative of a situation arising in the communications session for which an alert has been prescribed, said pattern of data corresponding to one or more predefined words or phrases, and
  - c) on recognising said pattern of data, issuing an alert to a system of the contact centre.
2. (Original) A method as claimed in claim 1, wherein said alert is effective to notify a human supervisor or an automated system to effect an intervention in said communications session.
3. (Original) A method as claimed in claim 1, wherein said alert is effective to provide said agent with information which is available to a system of the contact centre and which appears relevant to the data exchanged in the communications session.
4. (Original) A method as claimed in claim 1, wherein said communications session is a real-time communications session and said step of analysing said data is performed in real time as the communications session progresses, whereby said alert can issue in real time to affect the communications session in the event of said pattern being detected.
5. (Currently amended) A method as claimed in claim 4, wherein said communications session is one of a voice telephony call, and a video call.

6. (Currently amended) A method as claimed in claim 5 wherein said step of analysing data comprises recognising words or phrases in speech data and comparing said recognised words or phrases with one or more stored lists, whereby said pattern is a match between a spoken word or phrase and an entry in said one or more stored lists.

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Original) A method as claimed in claim 1, wherein said step of receiving data from said communications session comprises initiating a conference between the user and the agent and an automated data analysis system which receives communications session data from one or both of the user and agent.

12. (Original) A method as claimed in claim 1, wherein said step of issuing an alert comprises issuing an alert to a supervisor workstation system of the contact centre effective to cause a supervisor at a workstation to be provided with an audible or visible alert.

13. (Original) A method as claimed in claim 11, wherein said audible or visible alert includes a visible flag to be provided against said communications session on a display of the workstation which provides details of communications session under the supervision of said supervisor.

14. (Original) A method as claimed in claim 11, wherein said visible flag is selected from a series of flags each indicating a different condition.

15. (Original) A method as claimed in claim 1, wherein said step of issuing an alert comprises issuing an alert to a contact centre management system effective to

cause said contact centre management system to remove said agent from said communications session.

16. (Original) A method as claimed in claim 1, wherein said step of issuing an alert comprises issuing an alert to a contact centre management system, effective to cause said contact centre management system to conference in a human supervisor to said communications session.

17. (Original) A method as claimed in claim 1, wherein said step of issuing an alert comprises issuing an alert to a contact centre management system, effective to cause said contact centre management system to record the communications session.

18. (Original) A method as claimed in claim 1, wherein said step of analysing said data includes calculating a probability that a pattern match has been accurately detected.

19. (Currently amended) A computer program product comprising instructions in machine readable form which, when executed on a computer which is in receipt of data from a voice communications session between an agent of a contact centre and a user of said contact centre, are effective to cause the computer to:

- a) analyse received voice data from said communications session to locate a pattern of data indicative of a situation arising in the communications session for which an alert has been prescribed, said pattern of data corresponding to one or more predefined words or phrases, and
- b) on recognising said pattern of data, issue an alert to a system of the contact centre.

20. (Currently amended) A communications session monitoring system for monitoring a voice communications session between an agent of a contact centre and a user of said contact centre, the system comprising:

- a) an input for receiving voice data from said communications session,
- b) a data pattern store for storing one or more patterns of data indicative of a situation arising in the communications session for which an alert has been prescribed,
- c) an data analysis engine for analysing said data to locate at least one of said one or more patterns of data, and
- d) an alert generator for issuing an alert to a system of the contact centre.

21. (Currently amended) A contact centre comprising a communications session manager for managing a communications session between an agent of a contact centre and a user of said contact centre, and a system for monitoring said communications session, the monitoring system comprising:

- a) an input for receiving data from said communications session,
- b) a data pattern store for storing one or more patterns of data indicative of a situation arising in the communications session for which an alert has been prescribed, said pattern(s) of data corresponding to one or more predefined words or phrases,
- c) an data analysis engine for analysing said data to locate at least one of said one or more patterns of data, and
- d) an alert generator for issuing an alert to the contact centre management system.

22. (Currently amended) A contact centre as claimed in claim 21, wherein said intervention comprises adding to the communications session a supervisor of the contact centre.

23. (Currently amended) A method of supervising one or more agents in a contact centre comprising the steps of:

- a) upon one of said agents entering into a voice communications session with a user of the contact centre, providing voice data from said communications session to an automated data analysis unit;
- b) analysing said voice data automatically to detect a pattern of data indicative of a situation requiring supervisor intervention, said pattern of data corresponding to one or more predefined words or phrases; and
- c) on detection of said datapattern, alerting a supervisor of the situation indicated by said datapattern.

**In the Claims**

Claims 1, 5, 6 and 19-23 are amended as follows.

1. (Currently amended) A method of monitoring a voice communications session between an agent of a contact centre and a user of said contact centre comprising the steps of:
  - a) receiving voice data from said communications session,
  - b) analyzing said voice data to locate a pattern of data indicative of a situation arising in the communications session for which an alert has been prescribed, said pattern of data corresponding to one or more predefined words or phrases, and
  - c) on recognising said pattern of data, issuing an alert to a system of the contact centre.
2. (Original) A method as claimed in claim 1, wherein said alert is effective to notify a human supervisor or an automated system to effect an intervention in said communications session.
3. (Original) A method as claimed in claim 1, wherein said alert is effective to provide said agent with information which is available to a system of the contact centre and which appears relevant to the data exchanged in the communications session.
4. (Original) A method as claimed in claim 1, wherein said communications session is a real-time communications session and said step of analysing said data is performed in real time as the communications session progresses, whereby said alert can issue in real time to affect the communications session in the event of said pattern being detected.
5. (Currently amended) A method as claimed in claim 4, wherein said communications session is one of a voice telephony call, and a video call.

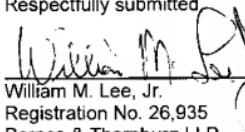
or more predefined words or phrases, and generates an alert on detection of such words or phrases. Such detection will occur whenever the words and phrases are detected, irrespective of any change in the speaker's voice amplitude or volume, which is advantageous over the Dewan system since a speaker may keep his or her voice under control even in cases where the content of the conversation is indicative of a problem.

Nothing in Dewan teaches or even suggests the detection of particular words and phrases, since Dewan is based on the assumption that alarm events can be detected entirely due to a change in amplitude or volume, and the system of Dewan is built to detect only changes in the values of particular parameters of a voice signal with respect to a base value.

In view of the amendments and arguments made herein, the applicants respectfully request the examiner withdraw the rejections, and allow the application.

April 4, 2007

Respectfully submitted

  
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**eFiled Application Information**

EFS ID	1654386
Application Number	10741518
Confirmation Number	4428
Title of Invention	Methods of monitoring communications sessions in a contact centre
First Named Inventor	Patrick Hession
Customer Number or Correspondence Address	23644
Filed By	William M. Lee/Shannon Vitullo
Attorney Docket Number	920673-95340
Filing Date	19-DEC-2003
Receipt Date	04-APR-2007
Application Type	Utility

**Application Details**

Submitted Files	Page Count	Document Description	File Size
Response-95340.pdf	8	Amendment - After Non-Final Rejection	257335 b

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